Innovation begins with inclusion[1]:

Integrating the Fab Charter into a Code of Conduct at Fab Lab Wgtn

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Abstract

We all commit to displaying the Fab Charter within our physical Labs but what does it actually mean on a daily basis? At Fab Lab Wgtn, we believe we have found a way to successfully integrate the charter in a meaningful way through developing a Code of Conduct. We work from a perspective of inclusiveness and of integrating indigenous perspectives into the ecosystem of Fab Lab Wgtn. Our Code of Conduct encourages specific behaviours or attitudes that set a basis for fabricating society; for creating the future that we want to live in, right now.

Keywords

Inclusive, decolonising, equitable, participation, fabricating society.

This paper was written by two pakeha[2] inhabitants of Aotearoa New Zealand, of mixed european heritage, with support from other members of the Fab Lab Wgtn whanau or family. We acknowledge the rich experience, critique and ongoing support that this whanau brings to the development of our Code of Conduct and the ethos of Fab Lab Wgtn. This paper was also written by 'freesearchers'[3] to be delivered to an audience so is structured differently than most academic papers.

Our Code of Conduct was developed within an Open Source ethos with input from a number of people. We believe the most engaging form that it appears in is our folding booklet, which has differently arranged information than the website version, for ease of reading and for an intentionally positive hierarchy of information.

It begins with a whakatauki, a proverb written in both te reo maori[4] and english, that was suggested as a match for our ethos. He waka eke noa | We are all in this together. It is followed by a statement about honouring the significance of indigenous perspectives and acknowledging that diverse approaches enrich our culture[5].

Turning the page, you will find on the left another of our favourite phrases: Innovation begins with inclusion, which leads to the explanation about what isn't considered discrimination, such as reasonable communication of

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[1] MIT Media Lab. 2016. *No Permission, No Apology Conference Keynote: Megan Smith*.

[2] Indigenous name for non-indigenous people

[3] Independent researchers

[4] First language spoken in Aotearoa New Zealand

[5] AMPU Guide: Common Cross-Cultural Communication Challenges. 2017.

boundaries, then lists characteristics that sit outside the dominant paradigm, usually subject to discrimination, which are protected within the Fab Lab Wgtn ecosystem.[6]

And on the other visible page, the five key behaviours that we ask participants in our ecosystem to cultivate in themselves and each other. These five have been carefully selected to reflect ideal everyday interactions within Fab Lab Wgtn. Being respectful and understanding why we disagree are essential to creating an environment where we can all have a healthy discussion, agree, disagree and carry on working together.

The final two pages focus on what steps to take to report an issue, and examples of harassing behaviours such as deliberate misgendering and offensive or unwelcome comments related to any of the protected characteristics.

And of course, on the back, we've identified our sources.

Fab Lab Wgtn has been involved with the global Fab network for six years, successfully bidding for Fab8 at the conference in Lima in 2011. A team then spent hours in the following year puzzling over the inventory list, participating in video calls at 2.00am, planning, building, painting and then officially opened our Lab during the 8th Fab conference which we hosted in 2012. For us, one of the appealing aspects of the global network was the expectation that each Lab would develop a personality that reflected its local community and values.

When we hosted the conference, an important facet of it was the welcome or powhiri we offered to local and international visitors. Our team comprised a number of Maori and other Pacific nation people as well as other new New Zealanders, or tauiwi, and the powhiri was a contemporary and culturally embedded welcome, led by Maori elders. This first welcome is the standard to which we work, ensuring that an indigenous perspective is foregrounded, and that a collaborative approach is privileged in our decisions and interactions.

Once the conference was over, as a part of defining who we are within this global network, we began to further examine existing documentation and look at how we would implement the ideas in the Fab Charter in Wellington, Aotearoa New Zealand. We began this process with a number of questions in mind:

What does a fab lab situated within a Design School, within a de/colonised society in the Global South look like? How does it engage with a global network, established in the USA, that claims not to colonise, instead to enable individual labs to develop their own local style within a framework?

While being on the margins of the world has had dire consequences for the indigenous people of New Zealand, being incorporated within the world's marketplace has different implications that must be examined and a radical response devised.[7]

We all display the Fab Charter within our physical Labs but what does it mean on a daily basis? The Fab Charter is intended to be a high level document, but it is rare that we discuss what this Charter means at an operational level. The last time our global community engaged with the Charter was at Fab8 in Aotearoa New Zealand, where Pieter van der Hijden led a discussion on the details of each point with approximately 150 people and a refresh is well overdue.

What does it mean to think about digital technology as a tool to resist and fight against colonial inequality and erasure?[8] Is accepting the Fab Charter just ticking a box to get on the fablabs.io site or is it meaningful? If it is a

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[6] TODO: Talk Openly, Develop Openly. 2017.

[7] Tuhiwai Smith, Linda. 1999. "Decolonizing Methodologies: Research and Indigenous Peoples."

meaningful document, are we able to influence its development and implementation globally? What experience do we have that we can share to inform and enrich other Labs' experience and how can we learn from other people's experience? How can we design an interactive experience that embeds the Code of Conduct into the behaviour of all participants in our ecosystem?

Informing the design process of our Code of Conduct and how people are introduced to it is Linda Tuhiwai Smith's statement that "the process of decolonising requires a radical compassion that reaches out, that seeks collaboration, and that is open to possibilities that can only be imagined as other things fall into place".[9] Adapting to and maintaining currency in an exponentially changing digital environment requires a high level of openness and imagination. We have applied these while looking at ways to integrate the Fab Charter into what we do every day. We believe that we have successfully found a way to integrate the charter meaningfully by developing and implementing a Code that elaborates on points within the charter. We have examined words within the Fab Charter such as; *access, enabling, safety, contribute*, and synthesised these into a living Code for everyone, in order to "claim a space in which to develop a sense of authentic humanity."[10]

We work from a perspective of inclusiveness and of integrating indigenous perspectives into the ecosystem of Fab Lab Wgtn. The word 'integrate' is used in the sense that these perspectives are making our fragmented culture whole. This aim for inclusiveness has been an underpinning framework that, until 2017, wasn't clearly stated in one place, but is now enshrined in our Code of Conduct. In doing so, we are reorienting design from the functionalist, rationalistic, and industrial traditions from which it emerged … towards a type of rationality and set of practices attuned to the relational dimension of life.[11]

We created the Code using a participatory design process, beginning with research on existing Codes of Conduct in similar fields. We developed our initial version by building on other people's work, putting it forward for discussion with a variety of interested or involved people in keeping with principles of the founding document of our country, Te Tiriti O Waitangi, in particular; partnership, equity and reciprocity.[12] The people who engaged in the development of our first version of this contributed from a variety of standpoints - Maori, tauiwi, fabbers, non-fabbers, staff & students at the university, advisory board members, active fabbers and enthusiastic people in aligned areas. Each time we reached a version that was acceptable to a small group of people, we would then take it to a broader group for further conversation.

When we were satisfied that this Code represented our views, we made it available online with explicit permission for comment and development in January 2017 alongside the launch of our new website. In doing so, we've ensured that people know about the Code of Conduct, have stated that it is a living document and that this publication is part of its ongoing development process.

As designers/makers we understand that, for a number of reasons, very few people will read and synthesise written information, whether it is web- or paper-based, without guided discussion and opportunity for questions in a safe/inclusive space.

Also, we understand that access must be inclusive and this means capacitating women and other disadvantaged communities, and supporting everyone to use and appreciate technology[13], so we have developed a range of strategies for ensuring that everyone is exposed to the information in the Code of Conduct, and for ensuring that

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[8] Martini, Beatrice. 2017. "Decolonizing Technology: A Reading List."

[9] Tuhiwai Smith, Linda. 1999. "Decolonizing Methodologies: Research and Indigenous Peoples."

[10] *ibid*

[11] Escobar, Arturo. 2017. "Response: Design for/by [and from] the 'Global South.'"

[12] "Treaty of Waitangi Principles." 2017. *Ministry of Health NZ.*

[13] "Beyond the Numbers: Gender and Access to the Internet | GenderIT.Org." 2017.

the Code continues to be meaningful within our ecosystem. Questioning how and for whom tools and services are created, and with which rights and restrictions they are made accessible,[14] was a large part of our process.

Two examples of integration of Code of Conduct into our everyday practice:

- About Fab tour

As part of engaging with Fab Lab Wgtn, all potential fabbers must participate in an About Fab tour before they do anything else. This is not only an introduction to the systems and processes that are possible within the space, but an introduction to the culture we encourage within the space. During the one hour session, participants are shown around the four rooms that we inhabit, as the host of the tour talks about what is possible, some of the safety constraints and what it means for us to be involved with the global Fab network.

To establish our position with regard to the indigenous culture of Aotearoa New Zealand, we begin the tour by introducing ourselves in te reo Maori, then continue in english, explaining what we've said. Foregrounding the indigenous culture is therefore new participants' first experience of Fab Lab Wgtn.

We have a sign above our entry doors that states "Innovation begins with inclusion", which is in close proximity to the Fab Charter and provides a great introduction to discussing the Code of Conduct. Throughout the tour, the culture of Open Source/ Open Design is outlined within the context of our Code.

In observing responses to our methods, many people who inhabit the non-dominant spaces of our culture - queers, trans people, Maori, Pacific people, women and migrants to name a few - visibly relax during the About Fab tours since we've included discussion of the Code of Conduct. They go from being shy and cautious to actively engaging within the hour. They relax enough to engage with the gentle humour which is also pervasive throughout the tour. They are then more likely to be confident participating in ongoing conversations about gender disparity, cultural and ethical discussions, part of the fabric of Fab Lab Wgtn. Ensuring that we identify a few of the harassing behaviours aloud during a tour means that we're not glossing over these, and that specific behaviours are identified as unacceptable both verbally and in writing. One of our fabbers was particularly appreciative of this technique and another commented that a booklet seemed more significant and less likely to be skipped over than a page on a website.[15]

- Induction into virtual space

As remote instructors and supernode for Fab Academy, we begin to introduce the Code of Conduct to our students and instructors in other countries by pointing it out on our website and then briefly discussing it at our initial meetings. Induction into the virtual space occurs a lot less frequently, and we have work to do on enriching the engagement with the Code there.

In 2016 we experimented with an online mihi whakatau for one of our remote students, an indigenous person from another colonised country. An advisory board member worked with us to conduct this, as she was particularly interested in developing culturally appropriate protocols in an online space. The response we had from the student involved was very positive, and our greeting had the effect we had hoped for, in that he felt warmly welcomed, that distance wasn't a problem and he was part of our family. He loved that Fab Lab Wgtn encourages human engagement and multi-disciplinary learning within an ostensibly 'machine focused' space. People are able to tell their own stories, without judgement, and each person's opinion is valuable.[16] We continue to develop our protocols in the virtual space, drawing on this experience.

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[14] Martini, Beatrice. 2017. "Decolonizing Technology: A Reading List."

[15] Crossley, Lucy, and Jonathan Van den Brink. 2017. Code of Conduct discussion.

[16] Pierite, Jean-Luc. 2016. Engaging with Fab Lab Wgtn remotely, conversation.

These are just two examples of how we weave the Code into the fabric of everyday experience at Fab Lab Wgtn. There are many other examples we could give you but these two illustrate how we curate the first in-depth experience that new fabbers have with us.

In developing our Code, we have answered and are still answering some of the questions we asked at the beginning of the project. We have also generated more questions and we have not yet found all of the answers, or the only answers. However, we have found the Code to be a valid way to interpret the ethos of the Fab Charter in a locally appropriate way. We are using digital technology as a tool to resist and fight against colonial inequality and erasure[17], designing an interactive experience to engage with the Code as a foundation for this. Our Code of Conduct addresses and encourages specific behaviours or attitudes and ways of interacting with each other that set a basis for fabricating society; for creating the future that we want to live in, right now. In association with the Fab Charter, it makes clear why we do what we do, and how our unique perspectives contribute to growth in this social movement on both a local and a global level.

The ethos of the Code of Conduct is impacting positively on our local and extended global ecosystem and we hope that sharing our experience via this paper and some of the workshops at Fab13 promotes further discussion and action, enabling us to continue fabricating an even more engaged, inclusive and equitable society within Fab Lab Wgtn. We leave you with this question: has our response been radical enough?

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[17] Martini, Beatrice. 2017. "Decolonizing Technology: A Reading List."